

10/540,993

Connecting via Winsock to STN

Welcome to SIN International! Enter x:x

LOGINID:sssptal600txm

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * *

NEWS 1 Web Page for STN Seminar Schedule - N. America
NEWS 2 OCT 02 CA/Capplus enhanced with pre-1907 records from Chemisches
Zentralblatt
NEWS 3 OCT 19 BEILSTEIN updated with new compounds
NEWS 4 NOV 15 Derwent Indian patent publication number format enhanced
NEWS 5 NOV 19 WPIX enhanced with XML display format
NEWS 6 NOV 30 ICSD reloaded with enhancements
NEWS 7 DEC 04 LINPADOCDB now available on STN
NEWS 8 DEC 14 BEILSTEIN pricing structure to change
NEWS 9 DEC 17 USPATOLD added to additional database clusters
NEWS 10 DEC 17 IMSDRUGCONF removed from database clusters and STN
NEWS 11 DEC 17 DGENE now includes more than 10 million sequences
NEWS 12 DEC 17 TOXCENTER enhanced with 2008 MeSH vocabulary in
MEDLINE segment
NEWS 13 DEC 17 MEDLINE and LMDLINE updated with 2008 MeSH vocabulary
NEWS 14 DEC 17 CA/Capplus enhanced with new custom IPC display formats
NEWS 15 DEC 17 STN Viewer enhanced with full-text patent content
from USPATOLD
NEWS 16 JAN 02 STN pricing information for 2008 now available
NEWS 17 JAN 16 CAS patient coverage enhanced to include exemplified
prophetic substances
NEWS 18 JAN 28 USPATFULL, USPAT2, and USPATOLD enhanced with new
custom IPC display formats
NEWS 19 JAN 28 MARPAT searching enhanced
NEWS 20 JAN 28 USGENET now provides USPTO sequence data within 3 days
of publication
NEWS 21 JAN 28 TOXCENTER enhanced with reloaded MEDLINE segment
NEWS 22 JAN 28 MEDLINE and LMDLINE reloaded with enhancements
NEWS 23 FEB 08 STN Express, Version 8.3, now available
NEWS 24 FEB 20 PCI now available as a replacement to DPCI
NEWS 25 FEB 25 IFIREF reloaded with enhancements
NEWS 26 FEB 25 IMSPRODUCT reloaded with enhancements
NEWS 27 FEB 29 WPINDEX/WPIDS/WPIX enhanced with ECLA and current
U.S. National Patent Classification

NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3,
AND CURRENT DISCOVER FILE IS DATED 20 FEBRUARY 2008

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items
NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that
specific topic.

All use of STN is subject to the provisions of the SIN Customer
agreement. Please note that this agreement limits use to scientific
research. Use for software development or design or implementation
of commercial gateways or other similar uses is prohibited and may
result in loss of user privileges and other penalties.

* * * * * * * * * * STN Columbus * * * * * * * * * * *

FILE 'HOME' ENTERED AT 21:57:00 ON 16 MAR 2008

=> file reg

McIntosh

10/540,993

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|----------------------|------------------|---------------|
| FULL ESTIMATED COST | 0.21 | 0.21 |

FILE 'REGISTRY' ENTERED AT 21:57:24 ON 16 MAR 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 14 MAR 2008 HIGHEST RN 1008127-41-0
DICTIONARY FILE UPDATES: 14 MAR 2008 HIGHEST RN 1008127-41-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

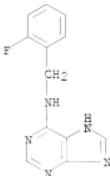
<http://www.cas.org/support/stndoc/properties.html>

```
=> e 6-(2-fluorobenzylamino)purine riboside/cn
E1      1   6-(2-FLUOROBENZYL)-N-(3-METHOXYPROPYL)-5,7-DIMETHYLPIRAZOLO(
1,5-A)PYRIDINE-3-CARBOXYAMIDE/CN
E2      1   6-(2-FLUOROBENZYLAMINO)PURINE/CN
E3      0 --> 6-(2-FLUOROBENZYLAMINO)PURINE RIBOSIDE/CN
E4      1   6-(2-FLUOROBIPHENYL-4-YL)-3-((1-ISOPROPYLPIPERIDIN-3-YL)METH
YL)-2-(2-METHYLPHENYL)QUINAZOLIN-4(3H)-ONE MONOTRIFLUORACET
ATE/CN
E5      1   6-(2-FLUOROTHOKY)-2-(2-(2-(MORPHOLIN-4-YL)THIAZOL-5-YL)VINY
L)BENZOXAZOLE/CN
E6      1   6-(2-FLUOROTHOKY)-2-METHYL-3-(4-(3-(PIPERIDIN-1-YL)PROPOXY)
PHENYL)-4(3H)-QUINAZOLINONE/CN
E7      1   6-(2-FLUOROTHOKY)-2-METHYL-3-(4-(3-(PYRROLIDIN-1-YL)PROPOXY)
PHENYL)-4(3H)-QUINAZOLINONE/CN
E8      1   6-(2-FLUOROTHYLYL)-2-(3-FLUOROPYRIDIN-4-YL)-5,6-DIHYDRO-1H-PY
RROLO(3,4-B)PYRROL-4-ONE/CN
E9      1   6-(2-FLUOROTHYLYL)-2-(PYRIDIN-4-YL)-5,6-DIHYDRO-1H-PYRROLO(3,
4-B)PYRROL-4-ONE/CN
E10     1   6-(2-FLUOROMETHYL-2-ACETOXYPROPYL)-2,4-DIHYDROXY-5-METHYLPIR
IMIDINE/CN
E11     1   6-(2-FLUOROMETHYL-2-ACETOXYPROPYL)-2,4-DIMETHOXY-5-METHYLPIR
IMIDINE/CN
E12     1   6-(2-FLUOROMETHYL-2-HYDROXYPROPYL)-2,4-DIHYDROXY-5-METHYLPIR
IMIDINE/CN

=> s e2
L1      1 "6-(2-FLUOROBENZYLAMINO)PURINE"/CN

=> d 11

L1      ANSWER 1 OF 1  REGISTRY COPYRIGHT 2008 ACS on STN
RN      67023-50-1  REGISTRY
ED      Entered STN: 16 Nov 1984
CN      9H-Purin-6-amine, N-[(2-fluorophenyl)methyl]- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN      1H-Purin-6-amine, N-[(2-fluorophenyl)methyl]- (9CI)
OTHER NAMES:
CN      6-(2-Fluorobenzylamino)purine
CN      N-[(2-Fluorophenyl)methyl]-1H-purin-6-amine
MF      C12 H10 F N5
LC      STN Files: CA, CAPLUS, CASREACT, TOXCENTER, USPAT2, USPATFULL
```



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

7 REFERENCES IN FILE CA (1907 TO DATE)
7 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> FILE CAPPLUS
 COST IN U.S. DOLLARS
 FULL ESTIMATED COST

| | SINCE FILE | TOTAL |
|--|------------|---------|
| | ENTRY | SESSION |
| | 8.07 | 8.28 |

FILE 'CPLUS' ENTERED AT 21:58:32 ON 16 MAR 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 16 Mar 2008 VOL 148 ISS 12
FILE LAST UPDATED: 14 Mar 2008 (20080314/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

<http://www.cas.org/infopolicy.html>

```

=> s 11
L2          7 L1

=> s 12 and riboside
        4314 RIBOSIDE
        840 RIBOSIDES
        4771 RIBOSIDE
L3          (RIBOSIDE OR RIBOSIDES)
          0 L2 AND RIBOSIDE

=> s 12 and ribose
        29374 RIBOZE
        176 RIBOSES
        29445 RIBOSE
L4          (RIBOZE OR RIBOSES)
          0 LZ2 AND RIBOSE

=> d bib abs hitstr 1-7 12

L2 ANSWER 1 OF 7 CAPLUS COPYRIGHT 20
AN 2008-168804 CAPLUS

```

L2 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:68804 CAPLUS
DN 148:127706

II Cosmetic and pharmaceutical compositions containing N6-substituted adenines with anticancer and antisenescent and immunosuppressive properties
 IN Popa, Igor; Holub, Jan; Lenczel, Rene; Werbrouck, Stefaan; Dolezal, Karel;
 Strnad, Miroslav; Zatlouskal, Marek; Massino, Frank J.

PA Czech Rep.
 SO U.S. Pat. Appl. Publ., 43pp., Cont.-in-part of U.S. Ser. No. 485,091.

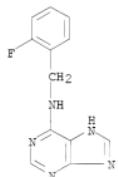
CODEN: USXXCO

DT Patent

LA English

FAN.CNT 2

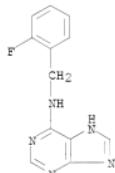
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|----------|
| PI US 2008014227 | A1 | 20080117 | US 2007-779828 | 20070718 |
| CZ 294535 | B6 | 20050112 | CZ 2001-2818 | 20010802 |
| WO 2003040144 | A2 | 20030515 | WO 2002-CZ45 | 20020801 |
| WO 2003040144 | A3 | 20040226 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DN, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NO, NZ, OM, PH,
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TZ, TM, TN, TR, TT, TZ,
UG, US, UZ, VN, YU, ZA, ZM, ZT
RW: GR, HK, KE, LS, MW, SD, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TZ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BE, BJ, CF,
CG, CI, CM, GA, GN, IQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| NZ 538596 | A | 20060929 | NZ 2002-538596 | 20020801 |
| NZ 538597 | A | 20060929 | NZ 2002-538597 | 20020801 |
| US 2005043328 | A1 | 20050224 | US 2004-485091 | 20040907 |
| US 7279482 | B2 | 20071009 | | |
| PRA1 CZ 2001-2818 | A | 20010802 | | |
| WO 2002-CZ45 | W | 20020801 | | |
| US 2004-485091 | A2 | 20040907 | | |
| NZ 2002-531086 | A1 | 20020801 | | |
| AB Novel heterocyclic derivs. based on N6-substituted adenine, having
anticancer, mitotic, immunosuppressive and antisenescent properties for
plant, animal and human cells and methods of their preparation. Included are
also pharmaceutical compns., cosmetic preps. and growth regulators, which
contain these derivs. as active compound and the use of these derivs. for
the preparation of drugs, cosmetic preps., in biotechnol. processes, in
cosmetics and in agriculture. | | | | |
| IT 67023-50-1P | | | | |
| RL: AGC (Agricultural use); BSV (Biological study, unclassified); COS
(Cosmetic use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL
(Biological study); PREP (Preparation); USES (Uses)
(cosmetic and pharmaceutical compns. containing N6-substituted adenines
with anticancer and antisenescent and immunosuppressive properties) | | | | |
| RN 67023-50-1 CAPLUS | | | | |
| CN 9H-Purin-6-amine, N-[(2-fluorophenyl)methyl]- (CA INDEX NAME) | | | | |



L2 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2007:1251923 CAPLUS

DN 148:91486
 II The first platinum(IV) complexes involving aromatic cytokinins or
 cyclin-dependent kinase inhibitors derived from 6-benzylaminopurine: X-ray
 structures of (BohB2+)[PtCl6]·H2O and

(RosH22+)[2(PtCl₆)Cl₂.4H₂O
AU Travnicek, Zdenek; Popa, Igor; Cajan, Michal; Herchel, Radovan; Marek,
Jaronir
CS Department of Inorganic Chemistry, Palacky University, Olomouc, CZ-771 47,
Czech Rep.
SO Polyhedron (2007), 26(18), 5271-5282
CODEN: PLVHDE; ISSN: 0277-5387
PB Elsevier B.V.
DT Journal
LA English
AB Pt(IV) complexes with cytokinins or CDK-inhibitors derived from
6-benzylaminopurine (Bap) [PtIV(LH)₂Cl₅], where LH⁺ stands for protonated
form of the Bap derivative, Boh = 6-(benzylamino)-2-[3-hydroxypropyl]amino]-9-
isopropylpurine, bohemine and Ros = 6-(benzylamino)-2-[1-
hydroxymethylpropyl]amino]-9-isopropylpurine, roscovitine, were prepared.
They were fully characterized by microanal., conductivity, FTIR, IR, 13C, 15N and
19F NMR and ES⁺ mass spectroscopy. The cytokinin mol. is coordinated
via N9 atom to Pt(IV) and N1, N7-protonated in case of the Boh complexes,
and N7 coordinated and N1-protonated in case of bohemine and Ros complexes
with CDK inhibitors. Predicted mol. geometries of the complexes were
supported by DFT calculations at the B3LYP level with the 6-311G*/*LANL2DZ and
aug-cc-pVQZ/LANL2DZ basis sets. All of the compds. were tested *in vitro*
for their cytotoxicity against four human cancer cell lines: malignant
melanoma (G361), osteogenic sarcoma (HOS), chronic myelogenous
erythroleukemia (K562) and breast adenocarcinoma (MCF7). The best result
was achieved for Ros complex, where IC₅₀ = 17 μM against K562. The
mol. structures of two ionic pair compds. [BohH22+][PtCl₆]⁻·H₂O and
[RosH22+][2(PtCl₆)Cl₂.4H₂O were determined by a single crystal x-ray
anal.
IT 67023-50-1, 6-(2-Fluorobenzylamino)purine
RL: RCT (Reactant); RACT (Reactant or reagent)
(complexation with platinum)
RN 67023-50-1 CAPLUS
CN 9H-Purin-6-amine, N-[(2-fluorophenyl)methyl]- (CA INDEX NAME)



RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN
AN 20051301890 CAPLUS
DN 144:120922
TI Preparation and biological activity of 6-benzylaminopurine derivatives in
plants and human cancer cells
AU Dolezal, Karel; Popa, Igor; Krystof, Vladimir; Spichal, Lukas; Fojtikova,
Martina; Holub, Jan; Lenobel, Rene; Schmuelling, Thomas; Strnad, Miroslav
CS Laboratory of Growth Regulators, Palacky University and Institute of
Experimental Botany AS CR, Olomouc, 783 71, Czech Rep.
SO Bioorganic & Medicinal Chemistry (2006), 14(3), 875-884
CODEN: BMCEP; ISSN: 0968-0896
PB Elsevier B.V.
DT Journal
LA English
OS CASREACT 144:120922
AB To study the structure-activity relationships of aromatic cytokinins, the
cytokinin activity at both the receptor and cellular levels, as well as
CDK inhibitory and anticancer properties of 38 6-benzylaminopurine (BAP)
derivs. were compared in various *in vitro* assays. The compds. were prepared

by the condensation of 6-chloropurine with corresponding substituted benzylamines. The majority of the synthesized derivs. exhibited high activity in all three of the cytokinin bioassays employed (tobacco callus, wheat senescence and *Amaranthus* bioassay). The highest activities were obtained in the senescence bioassay. For some compds. tested, significant differences of activity were found in the bioassays used, indicating that diverse recognition systems may operate and suggesting that it may be possible to modulate particular cytokinin-dependent processes with specific compds. Position-specific steric and hydrophobic effects of different Ph ring substituents on the variation of biol. activity were confirmed. In contrast to their high activity in bioassays, the BAP derivs. were recognized with much lower sensitivity than trans-zeatin in both *Achardiaopsis thaliana* AHK3 and AHK4 receptor assays. The compds. were also investigated for their effects on cyclin-dependent kinase 2 (CDK2) and for antiproliferative properties on cancer and normal cell lines. Several of the tested compds. showed stronger inhibitory activity and cytotoxicity than BAP. There was also a significant pos. correlation of the inhibitory effects on human and plant CDKs with cell proliferation of cancer and cytokinin-dependent tobacco cells, resp. This suggests that at least part of the antiproliferative effect of the new cytokinins was due to the inhibition of CDK activity.

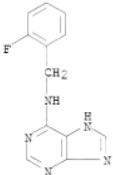
IT 67023-50-1P

RL: AGR (Agricultural use); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation and biol. activity of 6-benzylaminopurine derivs. in plants and human cancer cells)

RN 67023-50-1 CAPLUS

CN 9H-Purin-6-amine, N-[(2-fluorophenyl)methyl]- (CA INDEX NAME)



RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2005:1112164 CAPLUS
DN 144:31637
TI Palladium(II) complexes containing cytokinins derived from 6-benzylaminopurine
AU Travnicek, Zdenek; Sipl, Michal; Popa, Igor
CS Department of Inorganic Chemistry, Palacky University, Olomouc, 771 47, Czech Rep.
SO Journal of Coordination Chemistry (2005), 58(16), 1513-1521
CODEN: JCCMDQ; ISSN: 0095-8972
PB Taylor & Francis Ltd.
DT Journal
LA English
OS CASREACT 144:31637
AB Pd(II) complexes [Pd(LH₂Cl)₃] (1-12) containing 6-benzylaminopurine derivs. were prepared [L = 6-(2-methoxybenzylamino)purine (1), 6-(3-methoxybenzylamino)purine (2), 6-(4-methoxybenzylamino)purine (3), 6-(2-hydroxybenzylamino)purine (4), 6-(3-hydroxybenzylamino)purine (5), 6-(4-hydroxybenzylamino)purine (6), 6-(2-fluorobenzylamino)purine (7), 6-(3-fluorobenzylamino)purine (8), 6-(4-fluorobenzylamino)purine (9), 6-(2-chlorobenzylamino)purine (10), 6-(3-chlorobenzylamino)purine (11) and 6-(4-chlorobenzylamino)purine (12)]. The compds. were characterized by elemental anal., IR, ES+ MS and ¹H- and ¹³C-NMR spectroscopy, and two of them, 6 and 12, also by TG/DSC analyses. The complexes were screened

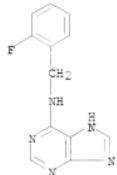
in vitro against the four human tumor cell lines G-361, HOS, K-562 and MCF7. No complexes showed significant cytotoxicity, with all IC₅₀ values >100 µM. There is no marked difference in relative cytotoxicity between the complexes and the free ligands.

IT 67023-50-1

RL: RCT (Reactant); RACT (Reactant or reagent)
(coordination to tetrachloropalladate(2-))

RN 67023-50-1 CAPLUS

CN 9H-Purin-6-amine, N-[(2-fluorophenyl)methyl]- (CA INDEX NAME)



RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

I2 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN
AN 20031376865 CAPLUS
DN 138:385444

TI Preparation of substituted adenines as drugs, cosmetics, and agrochemical growth regulators.

IN Doleral, Karel; Popa, Igor; Holub, Jan; Lenobel, Rene; Werbrouck, Stefaan; Strnad, Miroslav; Zatloukal, Marek

PA Ustav Experimentální Botaniky Akademie Ved České Republiky, Czech Rep.
SO PCT Int. Appl., 67 pp.

CODEN: PIXKD2

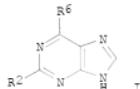
DT Patent

LA English

FAN.CNT 2

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|----------|
| WO 2003040144 | A2 | 20030515 | WO 2002-CZ45 | 20020801 |
| WO 2003040144 | A3 | 20040226 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
UA, UG, US, UZ, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BE, BJ, CF,
CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG | B6 | 20050112 | CZ 2001-2818 | 20010802 |
| CA 294553 | A1 | 20030515 | CA 2002-2455972 | 20020801 |
| CA 2455972 | A1 | 20030515 | AU 2002-3633362 | 20020801 |
| AU 2002363362 | A1 | 20030519 | EP 2002-750769 | 20020801 |
| EP 1429157 | A2 | 20040519 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, FI,
IE, SI, LT, LV, FI, RO, MK, CY, AL, IR, BG, CZ, EE, SE | | | | |
| BR 2002011597 | A | 20040713 | BR 2002-11597 | 20020801 |
| HU 2004001407 | A2 | 20041129 | HU 2004-1407 | 20020801 |
| HU 2004001407 | A3 | 20070529 | | |
| HU 2004001407 | A | 20041222 | CN 2002-818552 | 20020801 |
| CN 1556808 | A | 20050331 | JP 2003-542190 | 20020801 |
| JP 2005058386 | T | 20051223 | NZ 2002-531086 | 20020801 |
| NZ 531086 | A | 20060228 | SG 2004-3857 | 20020801 |
| SG 119228 | A1 | 20060229 | NZ 2002-538596 | 20020801 |
| NZ 538596 | A | 20060929 | NZ 2002-538597 | 20020801 |
| NZ 538597 | A | 20060929 | SG 2004-5059 | 20020801 |
| SG 127738 | A1 | 20061229 | RU 2004-105843 | 20020801 |
| RU 2302421 | C2 | 20070710 | | |

| | | | | |
|----------------------|----|----------|----------------|----------|
| MX 2004PA00936 | A | 20050217 | MX 2004-PA936 | 20040130 |
| NZ 2004009469 | A | 20040430 | NZ 2004-469 | 20040202 |
| ZA 200401461 | A | 20050613 | ZA 2004-1461 | 20040223 |
| US 2005043328 | A1 | 20050224 | US 2004-485091 | 20040907 |
| US 7279482 | B2 | 20071009 | | |
| US 2008014227 | A1 | 20080117 | US 2007-779828 | 20070718 |
| PRAI CZ 2001-2818 | A | 20010802 | | |
| NZ 2002-531086 | A1 | 20020801 | | |
| WO 2002-C245 | W | 20020801 | | |
| US 2004-485091 | A2 | 20040907 | | |
| OS MARPAT 138:385444 | | | | |
| GI | | | | |



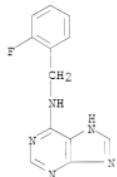
AB Title compds. [I; R2 = H, halo, OH, alkoxy, amino, hydrazo, SH, CO2H, cyano, NO2, amido, sulfo, sulfamido, acylamino, acyloxy, cycloalkyl, etc.; R6 = (substituted) alkyl, cycloalkyl, aryl, heterocyclyl, heteroaryl, aralkyl, cycloalkylalkylalkyl, amido, sulfo, etc., were prepared. Thus, 6-chloropurine, 3-chlorobenzylamine, and Et3N were heated in BuOH at 90° for 4 h to give 9% 6-(3-chlorobenzylamino)purine. This showed IC50 = 148.6 μM against G-361 cancer cells.

IT 67023-50-1P, 6-(2-Fluorobenzylamino)purine

RL: AGS (Agricultural use); BSU (Biological study, unclassified); PAC (Pharmacological activity); SPF (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (claimed compound; preparation of substituted adenines as drugs, cosmetics, and agrochemicals. growth regulators)

RN 67023-50-1 CAPLUS

CN 9H-Purin-6-amine, N-[(2-fluorophenyl)methyl]- (CA INDEX NAME)



L2 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN
AN 19891540297 CAPLUS

DN 111:140297

TI Research on the constituents of ginger in different preparations

AU Ye, Dingjiang; Ding, Anwei; Guo, Rong

CS Nanjing Coll. Tradit. Chin. Med., Nanjing, Peop. Rep. China

SO Zhongguo Zhongyao Zaishi (1989), 14(5), 278-80

CODEN: ZZIAE3; ISSN: 1001-5302

DT Journal

LA Chinese

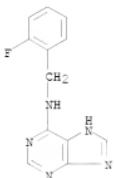
AB The constituents of ginger (*Zingiber officinale*) prepared by different processes (cold dried, hot dried, or baked at 220°) were compared by column chromatog. and mass spectra.

IT 67023-50-1 N-[(2-Fluorophenyl)methyl]-1H-purin-6-amine

RL: BIOL (Biological study)
(of ginger, processing effect on)

10/540,993

RN 67023-50-1 CAPLUS
CN 9H-Purin-6-amine, N-[(2-fluorophenyl)methyl]- (CA INDEX NAME)



L2 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN
AN 1978:439623 CAPLUS
DN 89:39623

oref 89:6115a,6118a

TI In vitro cytokinin binding to a particulate fraction of tobacco cells

AU Sussman, Michael R.; Kende, Hans

CS Plant Res. Lab., Michigan State Univ., East Lansing, MI, USA

SO Planta (1978), 140(3), 251-9

CODEN: PLANAB; ISSN: 0032-0935

DT Journal

LA English

AB At least 2 types of cytokinin-binding sites were present in a particulate fraction of tobacco (*Nicotiana tabacum*) cells that sediment at 80,000 - g. The major binding component had a low affinity towards cytokinins, was resistant to heating at 100°, and was not specific for biol. active cytokinin analogs. The 2nd site occurred in much lower frequency, was heat labile, showed high affinity towards cytokinins, and was specific for biol. active analogs of the hormone. The low-affinity binding site showed some of the same features as talcum powder, a non-biol. material which binds cytokinins in a nonspecific fashion. The properties of the high-affinity binding site are consistent with the expected characteristics of a cytokinin receptor. However, the role of the observed high-affinity binding site with regard to the biol. action of cytokinins is not yet known.

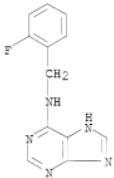
IT 67023-50-1

RL BIOL (Biological study)

(binding of, to particulate fraction of tobacco cells)

RN 67023-50-1 CAPLUS

CN 9H-Purin-6-amine, N-[(2-fluorophenyl)methyl]- (CA INDEX NAME)



=> file reg
COST IN U.S. DOLLARS
FULL ESTIMATED COST

| SINCE FILE ENTRY | TOTAL SESSION |
|------------------|---------------|
| 43.63 | 52.11 |

McIntosh

19/540, 293

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL
CA SUBSCRIBER PRICE ENTRY SESSION -5.60 -5.60

FILE 'REGISTRY' ENTERED AT 22:00:02 ON 16 MAR 2008
USE IS SUBJECT TO THE TERMS OF YOUR SIN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGE TERMS" FOR DETAILS.
COPYRIGHT (C) 2008 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 14 MAR 2008 HIGHEST RN 1008127-41-0
DICTIONARY FILE UPDATES: 14 MAR 2008 HIGHEST RN 1008127-41-0

New CDPs are now available for the following cities: Atlanta, Boston, Chicago, Denver, Houston, Los Angeles, New York City, Philadelphia, San Francisco, Seattle, and Washington, D.C.

Please note that search-term pricing does apply when

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on experimental property data refer to:

<https://www.w3.org/2001/sw/skos/schemaweb/2007-03-12/skos.html>

```
-->
Uploading C:\Program Files\Snexp\Queries\10540993.c.str
15      STRUCTURE UPLOADED

--> s 15
SAMPLE SEARCH INITIATED 22:04:09 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -          441 TO ITERATE

100.0% PROCESSED      441 ITERATIONS          0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:    7561 TO     10079
PROJECTED ANSWERS:        0 TO       0
```

```
16          0 SEA SSS SAM L5

=> s 15 full
FULL SEARCH INITIATED 22:04:13 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -      8369 TO ITERATE

100.0% PROCESSED      8369 ITERATIONS
SEARCH TIME: 00.00.01                                         4 ANSWERS
```

```

-> file caplus
COST IN U.S. DOLLARS          SINCE FILE      TOTAL
                                ENTRY        SESSION
FULL ESTIMATED COST          181.12       233.23

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE      TOTAL
                                                ENTRY        SESSION
CA SUBSCRIBER PRICE           0.00        -5.60

```

FILE 'CAPLUS' ENTERED AT 22:04:21 ON 16 MAR 2008
USE IS SUBJECT TO THE TERMS OF YOUR SIN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the original author(s).

held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 16 Mar 2008 VOL 148 ISS 12
FILE LAST UPDATED: 14 Mar 2008 (20080314/ED)

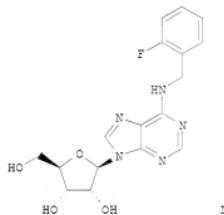
Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

<http://www.cas.org/infopolICY.html>

```
=> s 17
18      15 L7

=> d bib abs hitstr 1-15 18

18  ANSWER 1 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN
AN  2007474159 CAPLUS
DN  147:143613
TI  Preparation, biological activity and endogenous occurrence of
  N6-benzyladenosines
AU  Dolezal, Karel; Popa, Igor; Hauserova, Eva; Spichal, Lukas; Chakrabarty,
  Kuheli; Novak, Ondrej; Krystof, Vladimir; Voller, Jiri; Holub, Jan;
  Strnad, Miroslav
GS  Laboratory of Growth Regulators, Palacky University & Institute of
  Experimental Botany AS CR, Olomouc, 783 71, Czech Rep.
SO  Bioorganic & Medicinal Chemistry (2007), 15(11), 3737-3747
CODEN: BMECEP; ISSN: 0968-0896
PB  Elsevier Ltd.
DT  Journal
LA  English
OS  CASREACT 147:143613
GI
```



AB Cytokinin activity of forty-eight 6-benzyladenosine derivs., e.g. I, at both the receptor and cellular levels as well as their anticancer properties were compared in various in vitro assays. The compds. were prepared by the condensation of 6-chloropurine riboside with corresponding substituted benzylamines and characterized by standard collection of physico-chemical methods. The majority of synthesized derivs. exhibited high activity in all three of the cytokinin bioassays used (tobacco callus, wheat leaf senescence and Amaranthus bioassay). The highest activities were observed in the senescence bioassay. For several of the compds. tested, significant differences in activity were found between the bioassays used, indicating that diverse recognition systems may operate. This suggests that it may be possible to modulate particular cytokinin-dependent processes with specific compds. In contrast to their high activity in bioassays, the tested compds. were recognized with only very low

sensitivity in both *Arabidopsis thaliana* AHK3 and AHK4 receptor assays. The prepared derivs. were also investigated for their antiproliferative properties on cancer and normal cell lines. Several of them showed very strong cytotoxic activity against various cancer cell lines. On the other hand, they were not cytotoxic for normal murine fibroblast (NIH/3T3) cell line. This anticancer activity of cytokinin ribosides may be important, given that several of them occur as endogenous compds. in different organisms.

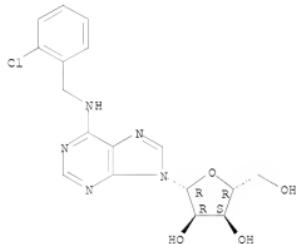
IT 23707-32-6P 101565-87-1P 288087-35-4P

RL: AGR (Agricultural use); PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of benzyladenosines via condensation of chloropurine riboside with benzylamines, and their cytokinin, antitumor activity and endogenous occurrence)

RN 23707-32-6 CAPLUS

CN Adenosine, N-[(2-chlorophenyl)methyl]- (CA INDEX NAME)

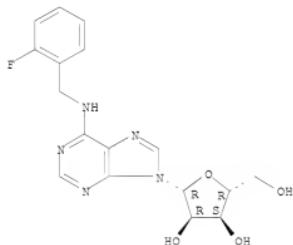
Absolute stereochemistry.



RN 101565-87-1 CAPLUS

CN Adenosine, N-[(2-fluorophenyl)methyl]- (CA INDEX NAME)

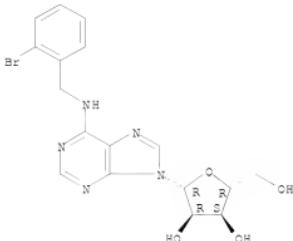
Absolute stereochemistry.



RN 288087-35-4 CAPLUS

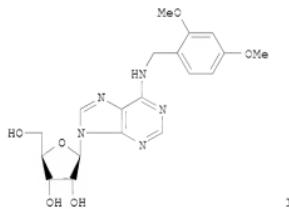
CN Adenosine, N-[(2-bromophenyl)methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

LA ANSWER 2 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN
AN 20071397569 CAPLUS
DN 147:694
TI Synthesis, biological evaluation and molecular modeling studies of N6-benzyladenosine analogues as potential anti-toxoplasma agents
AU Kim, Young Ah; Sharon, Anokhe; Chu, Chung K.; Rais, Reem H.; Al-Safarjalani, Omar N.; Naguib, Fardos N. M.; El Rouni, Mahmoud H.
CS University of Georgia College of Pharmacy, Athens, GA, 30602, USA
SO Biochemical Pharmacology (2007), 73(10), 1558-1572
CODEN: BCPHA6; ISSN: 0006-2952
PB Elsevier B.V.
DT Journal
LA English
OS CASREACT 147:694
GI



AB Toxoplasma gondii is an opportunistic pathogen responsible for toxoplasmosis. *T. gondii* is a purine auxotroph incapable of de novo purine biosynthesis and depends on salvage pathways for its purine requirements. Adenosine kinase (EC 2.7.1.20) is the major enzyme in the salvage of purines in these parasites. 6-Benzylthioguanine and analogs were established as "subversive substrates" for the *T. gondii*, but not for the human adenosine kinase. Therefore, these compds. act as selective antitoxoplasma agents. In the present study, a series of N6-benzyladenosine analogs were synthesized from 6-chloropurine riboside with substituted benzylamines via solution phase parallel synthesis. These N6-benzyladenosine analogs were evaluated for their binding affinity to purified *T. gondii* adenosine kinase. Furthermore, the antitoxoplasma efficacy and host toxicity of these compds. were tested in cell culture. Certain substituents on the aromatic ring improved binding affinity to *T. gondii* adenosine kinase when compared to the unsubstituted N6-benzyladenosine. Similarly, varying the type and position of the substituents on the aromatic ring led to different degrees of potency and

selectivity as antitoxoplasma agents. Among the synthesized analogs, N6-(2,4-dimethoxybenzyl)adenosine (I) exhibited the most favorable antitoxoplasma activity without host toxicity. The binding mode of the synthesized N6-benzyladenosine analogs were characterized to illustrate the role of addnl. hydrophobic effect and van der Waals interaction within an active site of *T. gondii* adenosine kinase by induced fit mol. modeling.

IT 23707-32-6P 101565-87-1P

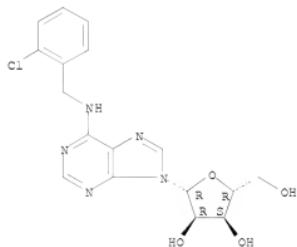
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(synthesis, biol. evaluation and mol. modeling studies of N6-benzyladenosine analogs as potential anti-toxoplasma agents)

RN 23707-32-6 CAPLUS

CN Adenosine, N-[(2-chlorophenyl)methyl]- (CA INDEX NAME)

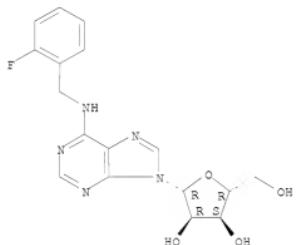
Absolute stereochemistry.



RN 101565-87-1 CAPLUS

CN Adenosine, N-[(2-fluorophenyl)methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN
AN 20071245615 CAPLUS

DN 146:474750

TI Three-Dimensional Quantitative Structure-Activity Relationship of Nucleosides Acting at the A3 Adenosine Receptor: Analysis of Binding and Relative Efficacy

AU Kim, Soo-Kyung; Jacobson, Kenneth A.

CS Molecular Recognition Section Laboratory of Bioorganic Chemistry, National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), National Institutes of Health (NIH), Bethesda, MD, 20892, USA

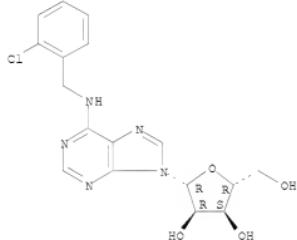
SO Journal of Chemical Information and Modeling (2007), 47(3), 1225-1233
 CODEN: JCISDB; ISSN: 1549-9596

PB American Chemical Society
 DT Journal
 LA English

AB The binding affinity and relative maximal efficacy of human A3 adenosine receptor (A3R) agonists were each subjected to ligand-based three-dimensional quant. structure-activity relation anal. Comparative mol. field anal. (CoMFA) and comparative mol. similarity indexes anal. (CoMSIA) used as training sets a series of 91 structurally diverse adenosine analogs with modifications at the N6 and C2 positions of the adenine ring and at the 3', 4', and 5' positions of the ribose moiety. The CoMFA and CoMSIA models yielded significant cross-validated q^2 values of 0.53 ($r^2 = 0.92$) and 0.59 ($r^2 = 0.93$, resp., and were further validated by an external test set (25 adenosine derivs.), resulting in the best predictive r^2 values of 0.84 and 0.70 in each model. Both the CoMFA and the CoMSIA maps for steric or hydrophobic, electrostatic, and hydrogen-bonding interactions well reflected the nature of the putative binding site previously obtained by mol. docking. A conformationally restricted bulky group at the N6 or C2 position of the adenine ring and a hydrophilic and/or H-bonding group at the 5' position were predicted to increase A3AR binding affinity. A small hydrophobic group at N6 promotes receptor activation. A hydrophilic and hydrogen-bonding moiety at the 5' position appears to contribute to the receptor activation process, associated with the conformational change of transmembrane domains 5, 6, and 7. The 3D-CoMFA/CoMSIA model correlates well with previous receptor-docking results, current data of A3AR agonists, and the successful conversion of the A3AR agonist into antagonists by substitution (at N6) or conformational constraint (at 5'-N-methyluronamide).

IT 23707-32-6
 RL: PAC (Pharmacological activity); PRP (Properties); BIOL (Biological study)
 (QSAR of nucleosides acting at A3 adenosine receptor)
 RN 23707-32-6 CAPLUS
 CN Adenosine, N-[(2-chlorophenyl)methyl]- (CA INDEX NAME)

Absolute stereocchemistry.



RE.CNT 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 4 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2005:44237 CAPLUS
 DN 142:230603

II A radial distribution function approach to predict A2B agonist effect of adenosine analogues

AU Gonzalez, Maykel Perez; Teran, Carmen; Fall, Yagamare; Teijeira, Marta; Besada, Pedro

CS Unit of Services, Department of Drug Design, Experimental Sugar Cane Station 'Villa Clara-Cienfuegos', Ranchuelo, Cuba

SO Biorganic & Medicinal Chemistry (2005), 13(3), 601-608
 CODEN: BMCECP; ISSN: 0968-0896

PB Elsevier Ltd.
 DT Journal

LA English

AB The radial distribution function (RDF) approach has been applied to the study of the A2B agonist effect of a set of 89 adenosine analogs reported with this activity. A model able to describe more than 70% of the variance in the exptl. activity was developed with the use of the mentioned approach. In contrast, none of the eleven different approaches including the use of Constitutional, Topol., Mol. walk count, BCUT, Galvez topol. charge indexes, 2D autocorrelations, Randic mol. profiles, Geometrical, 3D Morse, WHIM and GETAWAY descriptors was able to explain more than 47% of the variance in the mentioned property with the same number of descriptors.

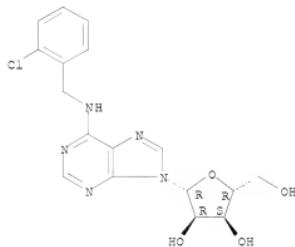
IT

RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(radial distribution function approach to predict A2B agonist effect of adenosine analogs)

RN 23707-32-6 CAPLUS

CN Adenosine, N-[{(2-chlorophenyl)methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 5 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2004:566634 CAPLUS
DN 141:123865

TI Substitution derivatives of N6-benzyl-adenosine, methods of their preparation, their use for preparation of drugs, cosmetic preparations and growth regulators, pharmaceutical preparations, cosmetic preparations and growth regulators containing these compounds

IN Dolezal, Karel; Popa, Igor; Zatloukal, Marek; Lenobel, Rene; Hradecka, Dana; Vojtesek, Borivoj; Udrizan, Stjepan; Mlejnek, Petr; Werbrouck, Stefaan; Strnad, Miroslav

PA Ustav Experimentalni Botaniky Akademii Ved Ceske Republiky, Czech Rep.; et al.

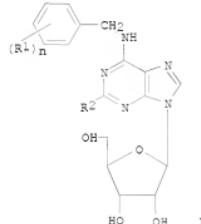
SO PCT Int. Appl., 114 pp.
CODEN: PIXKD2

DT Patent
LA English

FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------------|-----------|
| PI WO 2004058791 | A2 | 20040715 | WO 2003-CZ78 | 200311229 |
| WO 2004058791 | A3 | 20041028 | | |
| W: | A2, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK | | | |

| | | | | |
|----------------------------------------------------------------------------------------------------------------------------------|----|----------|----------------|----------|
| TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CZ 294538 | B6 | 20050112 | CZ 2002-4273 | 20021230 |
| AU 2003294608 | A1 | 20040722 | AU 2003-294608 | 20031229 |
| EP 1575973 | A2 | 20050921 | EP 2003-785482 | 20031229 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, IR, BG, CZ, EE, HU, SK | | | | |
| ZA 200506074 | A | 20060531 | ZA 2005-6074 | 20050728 |
| US 2006166925 | A1 | 20060727 | US 2005-540993 | 20050815 |
| PRAI CZ 2002-4273 | A | 20021230 | | |
| WO 2003-CZ78 | W | 20031229 | | |
| OS MARPAT 141:123865 | | | | |
| GI | | | | |



AB The invention concerns novel substitution derivs. of N6-benzyl-adenosine I, wherein n is 2-6; R1 is H, OH, halogen, alkoxy, amino, hydrazo, mercapto, methymercaptop, carboxyl, cyano, nitro, amido, sulfo, sulfamido, acylamino, acyloxy, alkylamino, dialkylamino, alkylmercaptop, carbylealkoxy, cycloalkyl, carbamoyl alkyl; R2 is H, OH, halogen, alkoxy, amino, hydrazo, mercapto, methymercaptop, carboxyl, cyano, nitro, amido, sulfo, sulfamido, acylamino, acyloxy, alkylamino, dialkylamino, alkylmercaptop, carbylealkoxy, cycloalkyl, carbamoyl, having anticancer, mitotic, immunosuppressive and anti-senescent properties for plant, animal and human cells. This invention also relates to the methods of preparation of these N6-benzyl-adenosine derivs. and their use as drugs, cosmetic preps. and growth regulators comprising these derivs. as active compound and use of these derivs. for preparation of pharmaceutical compns., in biotechn. processes, in cosmetics and in agriculture. Use of title compds. as mitotic or antimitotic compound, especially for treating cancer, psoriasis, rheumatoid arthritis, lupus, type I diabetes, multiple sclerosis, restenosis, polycystic kidney disease, graft rejection, graft vs. host disease and gout, parasitoses such as those caused by fungi or protists, or Alzheimer's disease, or as anti-neurodegenerative drugs, or to suppress immunostimulation or for the treatment of proliferative skin diseases. Thus, 2-amino-6-(2-methoxybenzylaminopurine riboside was prepared as growth regulator, and antitumor agent.

IT 23707-32-6P 101565-87-1P 288087-35-4P
722505-02-4P

RL: AGS (Agricultural use); BSU (Biological study, unclassified); COS (Cosmetic use); IMP (Industrial manufacture); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

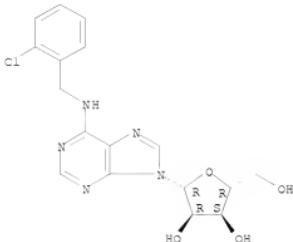
(preparation of N6-benzyladenosine nucleosides as antitumor, mitotic, immunosuppressive prodrugs, cosmetic agents, and growth regulators)

RN 23707-32-6 CAPLUS

CN Adenosine, N-[(2-chlorophenyl)methyl]- (CA INDEX NAME)

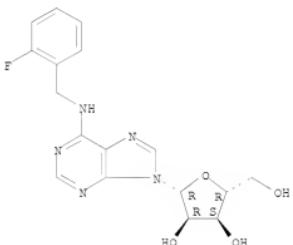
Absolute stereochemistry.

10/540, 993



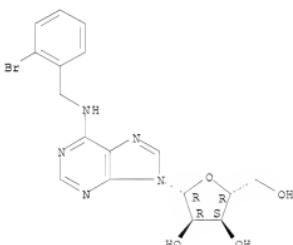
RN 101565-87-1 CAPLUS
CN Adenosine, N-[(2-fluorophenyl)methyl]- (CA INDEX NAME)

Absolute stereocchemistry.



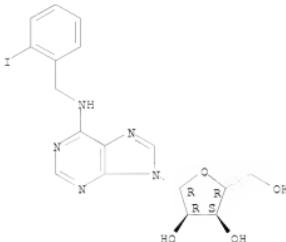
RN 288087-35-4 CAPLUS
CN Adenosine, N-[(2-bromophenyl)methyl]- (CA INDEX NAME)

Absolute stereocchemistry.



RN 722505-02-4 CAPLUS
CN Adenosine, N-[(2-iodophenyl)methyl]- (9CI) (CA INDEX NAME)

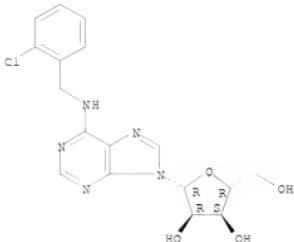
Absolute stereocchemistry.



L8 ANSWER 6 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2004:368857 CAPLUS
 DN 140:386000
 TI Compounds, compositions and methods for modulating fat metabolism for treatment of metabolic disorders
 IN Gaudriault, Georges; Kiliño, Ahmet; Bousquet, Olivier; Goupil-Lamy, Anne;
 Haroš, Itzak
 PA Obetotherapy Biotechnology, Fr.
 SO PCT Int. Appl., 461 pp.
 CODEN: PIXX02
 DT Patent
 LA English
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|----------|
| PI | WO 2004037159 | A2 | 20040506 | WO 2003-IL860 | 20031023 |
| | WO 2004037159 | A3 | 20040715 | | |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NL, NO, NZ,
OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PI, RO, SE, SI, SK, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| PRAI | AU 2003274652 | A1 | 20040513 | AU 2003-274652 | 20031023 |
| | US 2002-4203169 | P | 20021023 | | |
| | WO 2003-IL860 | W | 20031023 | | |
| OS | MARPAT 140:386000 | | | | |
| AB | Methods and compns. of identifying candidate compds., for modulating fat metabolism and/or inhibiting Apobec-1 activity are provided. The invention relates to compds. and pharmaceutical compns. which are useful for regulating fat metabolism and can be used for treatment of diseases and disorders selected from the group consisting of overweight, obesity, atherosclerosis, hypertension, non-insulin dependent diabetes mellitus, pancreatitis, hypercholesterolemia, hypertriglyceridemia, hyperlipidemia. | | | | |
| IT | 23707-32-6 | | | | |
| RL | PA (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) | | | | |
| | (compds., compns. and methods for modulating fat metabolism for treatment of metabolic disorders) | | | | |
| RN | 23707-32-6 CAPLUS | | | | |
| CN | Adenosine, N-[(2-chlorophenyl)methyl]- (CA INDEX NAME) | | | | |

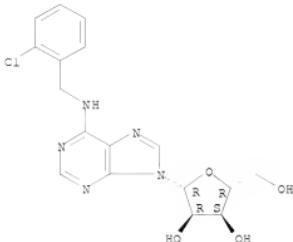
Absolute stereochemistry.



18 ANSWER 7 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2003:364951 CAPLUS
 DN 139:345305

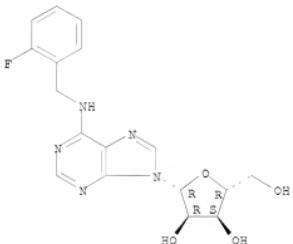
TI N6-Substituted adenosine derivatives: selectivity, efficacy, and species differences at A3 adenosine receptors
 AU Gao, Zhan-Guo; Blaustein, Joshua B.; Gross, Ariel S.; Melman, Neli; Jacobson, Kenneth A.
 CS Laboratory of Bioorganic Chemistry, Molecular Recognition Section, National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases, Bethesda, MD, 20892, USA
 SO Biochemical Pharmacology (2003), 65(10), 1675-1684
 CODEN: BCPMA6; ISSN: 0006-2952
 PB Elsevier Science Inc.
 DT Journal
 LA English
 AB The activation of the human A3 adenosine receptor (AR) by a wide range of N6-substituted adenosine derivs. was studied in intact CHO cells stably expressing this receptor. Selectivity of binding at rat and human ARs was also determined. Among N6-alkyl substitutions, small N6-alkyl groups were associated with selectivity for human A3ARs vs. rat A3ARs, and multiple points of branching were associated with decreased hA3AR efficacy. N6-Cycloalkyl-substituted adenosines were full (<5 carbons) or partial (>6 carbons) hA3AR agonists. N6-(endo-norbornyl)adenosine was the most selective for both rat and human A1ARs. Numerous N6-arylmethyl analogs, including substituted benzyl, tended to be more potent in binding to A1 and A3 vs. A2AARs (with variable degrees of partial to full A3AR agonisms). A chloro substituent decreased the efficacy depending on its position on the benzyl ring. The A3AR affinity and efficacy of N6-arylethyl adenosines depended highly on stereochem., steric bulk, and ring constraints. Stereoselectivity of binding was demonstrated for N6-(R-1-phenylethyl)adenosine vs. N6-(S-1-phenylethyl)adenosine, as well as for the N6-(1-phenyl-2-pentyl)adenosine, at the rat, but not human A3AR. Interestingly, DPMA, a potent agonist for the A2AAR (K_i=4 nM), was demonstrated to be a moderately potent antagonist for the human A3AR (K_i=100 nM). N6-[(1S,2R)-2-Phenyl-1-cyclopropyl]adenosine was 1100-fold more potent in binding to human (K_i=0.63 nM) than rat A3ARs. Dual acting A1/A3 agonists (N6-3-chlorobenzyl-, N6-(S-1-phenylethyl)-, and 2-chloro-N6-(R-phenylisopropyl)adenosine) might be useful for cardioprotection.
 IT 23707-32-6, N6-(2-Chlorobenzyl)adenosine 101565-87-1, N6-(2-Fluorobenzyl)adenosine
 RI: PAC (Pharmacological activity); BIOL (Biological study)
 (N6-Substituted adenosine derivs. and selectivity, efficacy, and species differences at A3 adenosine receptors)
 RN 23707-32-6 CAPLUS
 CN Adenosine, N-[(2-chlorophenyl)methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 101565-87-1 CAPLUS
 CN Adenosine, N-[(2-fluorophenyl)methyl]- (CA INDEX NAME)

Absolute stereocchemistry.



RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 8 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 20001720701 CAPLUS
 DN 134:65798
 TI Adenosine Analogues as Inhibitors of Trypanosoma brucei Phosphoglycerate Kinase: Elucidation of a Novel Binding Mode for a 2-Amino-N6-Substituted Adenosine
 AU Bressi, Jerome C.; Choe, Jungwoo; Hough, Melinda T.; Buckner, Frederick S.; Van Voorhis, Wesley C.; Verlinde, Christophe L. M. J.; Hol, Wim G. J.; Gelb, Michael H.
 CS Departments of Chemistry Biochemistry Medicine and Biological Structure, University of Washington, Seattle, WA, 98195, USA
 SO Journal of Medicinal Chemistry (2000), 43(22), 4135-4150
 CODEN: JMCMAR; ISSN: 0022-2623
 PB American Chemical Society
 DT Journal
 LA English
 AB As part of a project aimed at structure-based design of adenosine analogs as drugs against African trypanosomiasis, N6-, 2-amino-N6-, and N2-substituted adenosine analogs were synthesized and tested to establish structure-activity relationships for inhibiting Trypanosoma brucei glycosomal phosphoglycerate kinase (PGK), glyceraldehyde-3-phosphate dehydrogenase (GAPDH), and glycerol-3-phosphate dehydrogenase (GPDH). Evaluation of x-ray structures of parasite PGK, GAPDH, and GPDH complexed with their adenosyl-bearing substrates led the authors to generate a series of adenosine analogs which would target all three enzymes simultaneously. There was a modest preference by PGK for N6-substituted analogs bearing the 2-amino group. The best compound in this series,

2-amino-N6-[2'-(*p*-hydroxyphenyl)ethyl]adenosine (**I**), displayed a 23-fold improvement over adenosine with an IC₅₀ of 130 μ M. 2-[2'-(*p*-Hydroxyphenyl)ethyl]amino]adenosine was a weak inhibitor of *T. brucei* PGK with an IC₅₀ of 500 μ M. To explore the potential of an additive effect that having the N6 and N2 substitutions in one mol. might provide, the best ligands from the two series were incorporated into N6,N2-disubstituted adenosine analogs to yield N6-(2'-phenylethyl)-2-[2'-(*p*-phenylethyl)amino]adenosine as a 30 μ M inhibitor of *T. brucei* PGK which is 100-fold more potent than the adenosine template. In contrast, these series gave no compds. that inhibited parasitic GAPDH or GPDH more than 10-20% when tested at 1.0 mM. A 3.0 \AA x-ray structure of a *T. brucei* PGK/I complex revealed a binding mode in which the nucleoside analog was flipped and the ribosyl moiety adopted a syn conformation as compared with the previously determined binding mode of ADP. Mol. docking expts. using QXP and SAS program suites reproduced this "flipped and rotated" binding mode.

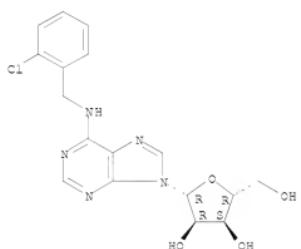
IT 23707-32-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (adenosine analogs as inhibitors of *Trypanosoma brucei* phosphoglycerate kinase and elucidation of a novel binding mode for a 2'-amino-substituted adenosine)

RN 23707-32-6 CAPLUS

CN Adenosine, N-[2-chlorophenyl]methyl- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 9 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2000:369027 CAPLUS
 DN 133:164255

TI A novel and facile reaction to N6-alkylated adenosine via benzotriazole as a synthetic auxiliary
 AU Afify, Hanan M. N. M.; Pedersen, Erik B.; Zahran, Magdy A.
 CS Chemistry Department, University of Southern Denmark, Odense University,
 Odense, DK-5230, Den.
 SO Journal of Heterocyclic Chemistry (2000), 37(2), 339-341
 CODEN: JHTCAD; ISSN: 0022-152X

PB HeteroCorporation
 DI Journal
 LA English
 OS CASREACT 133:164255

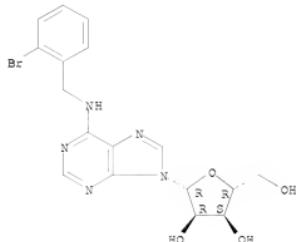
AB The reaction of benzotriazole with aliphatic, aromatic or heteroarom. aldehyde and adenosine leads to a benzotriazole adduct which is reduced with sodium borohydride to the corresponding N6-alkylated adenosine derivs. This procedure is also utilized in a new route to N6-(3-iodobenzyl)adenosine-5'-N-methyluronamide (IB-MECA) which is considered an important adenosine agonist at A2 adenosine receptors.

IT 288087-35-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of N6-alkylated adenosines via benzotriazole intermediates)

10/540,993

RN 288087-35-4 CAPLUS
CN Adenosine, N-[(2-bromophenyl)methyl]- (CA INDEX NAME)

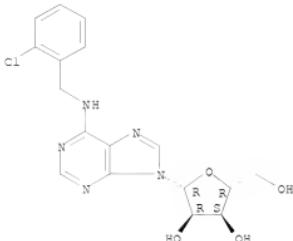
Absolute stereochemistry.



RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

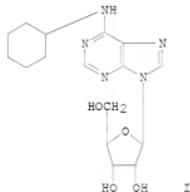
LB ANSWER 10 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN
AN 1998;329095 CAPLUS
DN 129;75990
TI A functional screening of adenosine analogs at the adenosine A2B receptor:
a search for potent agonists
AU De Zwart, Maarten; Link, Regina; Von Frijtag Drabbe Kunzel, Jacobien K.;
Cristalli, Gloria; Jacobson, Kenneth A.; Townsend-Nicholson, Andrea;
IJzerman, Ad P.
CS Division of Medicinal Chemistry, Leiden/Amsterdam Center for Drug
Research, Leiden University, Leiden, 2300 RA, Neth.
SO Nucleosides & Nucleotides (1998), 17(6), 969-985
CODEN: NUNUDS; ISSN: 0732-8311
PB Marcel Dekker, Inc.
DT Journal
LA English
AB Various adenosine analogs were tested at the adenosine A2B receptor.
Agonist potencies were determined by measuring the cAMP production in Chinese
Hamster Ovary cells expressing human A2B receptors. 5'-N-Substituted
carboxamidoadenosines were most potent. 5'-N-Ethylcarboxamidoadenosine
(NECA) was most active with an EC50 value of 3.1 nM. Other ribose
modified derivs. displayed low to negligible activity. Potency was
reduced by substitution on the exocyclic amino function (N6) of the purine
ring system. The most active N6-substituted derivative N6-methyl-NECA was 5
fold less potent than NECA. C8- and most C2-substituted analogs were
virtually inactive. 1-Deaza-analogs had a reduced potency, 3- and 7-
deazanalogues were not active.
IT 23707-32-6
RL: BAC (Biological activity or effector, except adverse); BPR (Biological
process); BSU (Biological study, unclassified); BIOL (Biological study);
PROC (Process)
(functional screening of adenosine analogs at adenosine A2B receptor:
search for potent agonists)
RN 23707-32-6 CAPLUS
CN Adenosine, N-[(2-chlorophenyl)methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

10 ANSWER 11 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN
AN 1988105930 CAPLUS
DN 108:105930
TI Definition of subclasses of adenosine receptors associated with adenylyl cyclase: interaction of adenosine analogs with inhibitory A1 receptors and stimulatory A2 receptors
AU Ukena, Dieter; Olsson, Ray A.; Daly, John W.
CS Natl. Inst. Arthritis, Diabetes, Dig. Kidney Dis., Natl. Inst. Health,
Bethesda, MD, 20892, USA
SO Canadian Journal of Physiology and Pharmacology (1987), 65(3), 365-76
CODEN: CJPPA3; ISSN: 0008-4212
DT Journal
LA English
GI



AB The structure-activity relationships of 63 adenosine analogs as agonists for the A1 adenosine receptors that mediate inhibition of adenylyl cyclase activity in rat fat cells and for the A2 adenosine receptors that mediate stimulation of adenylyl cyclase in rat pheochromocytoma PC12 cells and human platelets were determined. The lack of correspondence between the structure-activity relationships of these analogs at the A1 and A2 receptors appear definitive in terms of establishing the existence of A1 and A2 subclasses of adenosine receptors. However, significant differences in the agonist profiles at A2 receptors of platelet and PC12 indicate a certain degree of structural heterogeneity within the members of the A2 adenosine receptor subclass. Whether such differences are due to different species or different cell types is not known. A set of adenosine analogs, such as N6-cyclohexyl-, (I), N6-R-, and N6-S-1-phenyl-2-propyladenosine, 5'-N-ethylcarboxamidoadenosine and its N6-cyclohexyl derivative, 2-chloroadenosine, and 2-phenylaminoadenosine, appear to represent a series of analogs useful for pharmacological characterization of A1 and A2 classes of adenosine receptors.

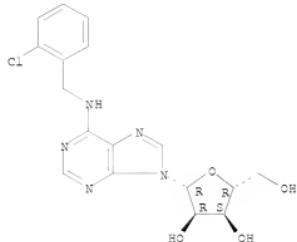
IT 23707-32-6
RL: PRP (Properties)

(interaction of, with A1 and A2 adenosine receptors, of humans and laboratory animals)

RN 23707-32-6 CAPLUS

CN Adenosine, N-[(2-chlorophenyl)methyl]- (CA INDEX NAME)

Absolute stereochemistry.



18 ANSWER 12 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN

AN 1986:603338 CAPLUS

DN 105:203338

REF 105:32637A,32640a

TI Structure-activity relationships for N6-substituted adenosines at a brain A1-adenosine receptor with a comparison to an A2-adenosine receptor regulating coronary blood flow

AU Daly, John W.; Padgett, William; Thompson, Robert D.; Kusachi, Shozo; Bugni, William J.; Olsson, Ray A.

CS Lab. Biolog. Chem., Natl. Inst. Arthritis, Diabetes, Dig. Kidney Dis., Bethesda, MD, 20205, USA

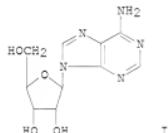
SO Biochemical Pharmacology (1986), 35(15), 2467-81

CODEN: BCPKA6; ISSN: 0006-2952

DT Journal

LA English

GI



AB A series of 145 N6-substituted adenosine (I) analogs were screened as inhibitors of the binding of [³H]cyclohexyladenosine to a purinergic A1 receptor in rat brain membranes, and the results were compared to the potencies of these analogs in increasing coronary blood flow via activation of a purinergic A2 receptor. The A1 receptor shows greater stereoselectivity in the N6 region of the receptor towards asym. aralkyl substituents and shows greater bulk tolerance in the N6 region such that it retains affinity for certain N6-tertiary alkyladenosines and N6-cycloalkyladenosines that are inactive at the coronary A2 receptor. At the A1 receptor, the most potent analogs have either aliphatic N6-substituents with ≥4 methylene residues or have an N6-halophenyl substituent. At the A2 receptor, the most potent analogs have an N6-phenoxyethyl or similar heteroarylethyl substituent. Certain sets or series of analogs appear useful for identifying the subtypes of purinergic receptors involved in physiol. functions.

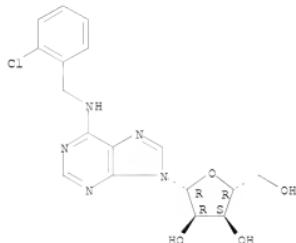
IT 23707-32-6 101565-87-1

10/540,993

RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process) (purinergic receptor subtypes interaction with, structure in relation to)

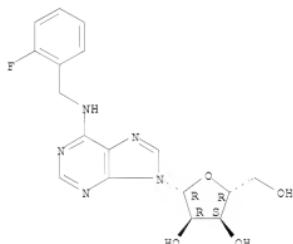
RN 23707-32-6 CAPLUS
CN Adenosine, N-[{(2-chlorophenyl)methyl]- (CA INDEX NAME)

Absolute stereochemistry.

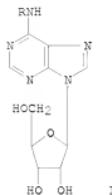


RN 101565-87-1 CAPLUS
CN Adenosine, N-[{(2-fluorophenyl)methyl]- (CA INDEX NAME)

Absolute stereochemistry.



L8 ANSWER 13 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN
AN 19861:199592 CAPLUS
DN 104:199592
OREF 104:31391a,31394a
TI Dog coronary artery adenosine receptor. Structure of the N6-aryl
subregion
AU Kusachi, Shozo; Thompson, Robert D.; Yamada, Noboyuki; Daly, Daniel T.;
Olsson, R. A.
CS Coll. Med., Univ. South Florida, Tampa, FL, 33612, USA
SO Journal of Medicinal Chemistry (1986), 29(6), 989-96
CODEN: JMCMAR; ISSN: 0022-2623
DT Journal
LA English
GI

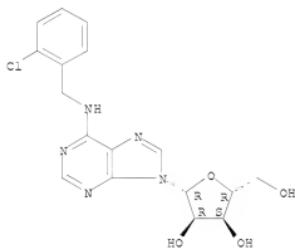


AB Ninety-two adenosine derivs. [*I*; R = 3-phenylpropyl, 4-phenylbutyl, 2,2-diphenylethyl, 2-(2-pyridyl)ethyl, halophenyl, 1-naphthyl, 3-indolyl, etc.], 47 of which were prepared by reaction of the appropriate amine with 6-chloropurine ribonucleoside [2004-06-0], were tested for adenosine receptor-binding activity in dog coronary arteries *in vitro*. The structure-activity relations of *I* drawn from these results are discussed with respect to the presence of an N6-aryl subregion in the coronary artery A₁-adenosine receptor.

IT 23707-32-6
RL: BIOL (Biological study)
(adenosine receptor-binding activity of, in coronary artery, structure

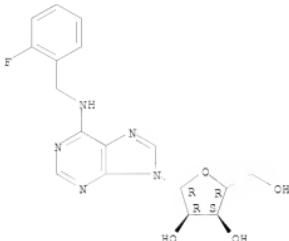
RN 23707-32-6 CAPLUS
CN 3-[4-(2-chlorophenyl)methyl]- (SI INDEX NAME)

Absolute stereochemistry



IT 10156S-87-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and coronary artery adenosine receptor-binding activity of,
structure in relation to)
RN 10156S-87-1 CAPLUS
CN Adenosine, N-[(2-fluorophenyl)methyl]- (CA INDEX NAME)

Absolute stereochemistry.



18 ANSWER 14 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 19851488177 CAPLUS

DN 103:88177

OREF 103:14177a,14180a

TI Adenosine derivatives and their use as anticonvulsants

IN Irmischer, Klaus; Uhl, Juergen

PA Merck Patent G.m.b.H. , Fed. Rep. Ger.

SO U.S., 5 pp. Cont.-in-part of U.S. Ser. No. 303,295, abandoned.

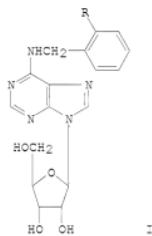
CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------------|------|----------|-----------------|----------|
| PI US 4514405 | A | 19850430 | US 1984-573178 | 19840123 |
| PRAI US 1981-303295 | A2 | 19810917 | | |
| OS MARPAT 103:88177 | | | | |
| GI | | | | |



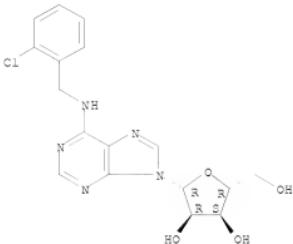
AB N6-Benzyladenosines I (R = H, Cl, F, Br, CF₃), useful as anticonvulsants (no data), were prepared. Thus, a mixture of 28.6 g 6-chloro-9-(β-D-ribofuranosyl)purine, 14.2 g o-ClC₆H₄CH₂NH₂, 400 mL DMF, 400 mL isopropanol, and 50 mL Et₃N was allowed to stand 4 days at 20° to give I (R = Cl) (yield not given).

IT 23707-32-6P
 RL: SPP (Synthetic preparation); PREP (Preparation)
 (preparation of)

RN 23707-32-6 CAPLUS

CN Adenosine, N-[{(2-chlorophenyl)methyl]- (CA INDEX NAME)

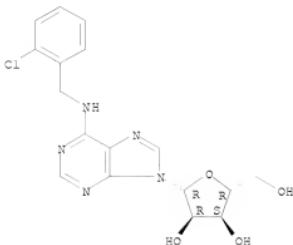
Absolute stereochemistry.



18 ANSWER 15 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 19691115505 CAPLUS
 DN 70:1115505
 OREF 70:212591a,21594a
 TI N⁶-Aralky- L adenosine derivatives
 IN Thiel, Max; Stach, Kurt; Jahn, Werner; Schaumann, Wolfgang; Dietmann, Karl
 PA Boenninger, G. F., und Soehne G.m.b.H.
 SO S. Africn, 15 pp.
 CODEN: GFXXAB
 DT Patent
 LA English
 FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|----------|-----------------|----------|
| ZA 6707414 | ----- | 19680502 | ----- | ----- |
| DE 1670171 | DE | | | |
| FR 1550512 | FR | | | |
| GB 1145789 | GB | | | |
| US 3506643 | 19700414 | US | | 19671018 |
| PRAI DE | 19661209 | | | |
| DE | 19670711 | | | |
| OS MARPAT 70:1115505 | | | | |
| GI For diagram(s), see printed CA Issue. | | | | |
| AB The title compds. (I), where halogen, alkyl, alkoxy, F3C or alkylthio, or two substituents may be H or a methylenedioxy, are prepared from the corresponding D-ribosides and benzylamines, or from the corresponding N'-substituted adenosine derivs. Thus, 8.2 g. tri-O-acetyl-6-chloro-9-β-D-ribofuranosyl-9-H-purine and 7.2 g. 2-ClC ₆ H ₄ CH ₂ NH ₂ in 120 cc. iso-PrOH were refluxed 2 hrs., worked up and the residue dissolved in 100 cc. MeOH, 10 cc. N NaOH solution added and the mixture refluxed 1 hr. to yield 4 g. I (R = 2-Cl), m. 182-3°. The following I were similarly prepared (R and m.p. given): 3,4-CI ₂ , 182-3°; 4-MeO, 146-7°; 3,4(MeO) ₂ , 135-6°; 3,4,5-(MeO) ₃ , 118-19°; 2-MeO, 147-8°; 2-Cl, 174-5°; 3-Cl, 168-9°; 2-Me, 191-2°; 2-MeS, 127-8°; 2-F3C, 157-8°; 3,5-(MeO) ₂ , 191-2°; 2-MeS, 127-8°; 2-F3C, 160-1°; and 3-F3C, 111-12°. To a suspension of 10 g. 2',3'-O-isopropylideneadenosine in 200 cc. MeCN, 10 g. p-BrC ₆ H ₄ Br was added and the mixture refluxed 24 hrs. with stirring. The precipitate which formed was filtered off, dissolved in 150 cc. MeOH and an equal volume 2N NaOH solution was added. The mixture was heated on a steam bath 20 min., extracted with CHCl ₃ , evaporated, and the residue dissolved in 200 cc. HCO ₂ N. Water was added until the mixture became cloudy. The mixture was left standing 1 day at ambient temperature, after which it was evaporated in vacuo, and the residue made weakly alkaline with an aqueous solution of concentrated NH ₃ to yield 5.6 g. I (R = 4-Br), m. 168-9°. I exhibit an effect on blood vessels and circulation. | | | | |
| IT 23707-32-6 | SPN (Synthetic preparation); PREP (Preparation) | | | |
| RL (preparation of) | | | | |
| RN 23707-32-6 CAPLUS | | | | |
| CN Adenosine, N-[(2-chlorophenyl)methyl]- (CA INDEX NAME) | | | | |

Absolute stereochemistry.



=> d his

(FILE 'HOME' ENTERED AT 21:57:00 ON 16 MAR 2008)

FILE 'REGISTRY' ENTERED AT 21:57:24 ON 16 MAR 2008
E 6-(2-FLUOROBENZYLAMINO)PURINE RIBOSIDE/CN

L1 1 S E2

FILE 'CAPLUS' ENTERED AT 21:58:32 ON 16 MAR 2008
L2 7 S L1
L3 0 S L2 AND RIBOSIDE
L4 0 S L2 AND RIBOSE

FILE 'REGISTRY' ENTERED AT 22:00:02 ON 16 MAR 2008
L5 STRUCTURE uploaded
L6 0 S L5
L7 4 S L5 FULL

FILE 'CAPLUS' ENTERED AT 22:04:21 ON 16 MAR 2008
L8 1S S L7